

# Duraklick

A brand of SOLTOP Energie GmbH

soltop  
energie 

## Mounting system East-West

EW 10°

GE 10°

## Assembly instruction

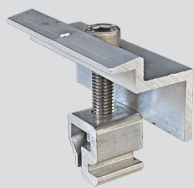


## Welcome!

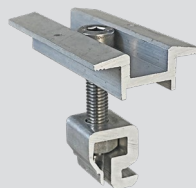
We are delighted that you have chosen the Duraklick-ECO mounting system. This guide explains the professional installation of the mounting system. If you have questions or suggestions, we will be happy to hear from you.

Your team  
SOLTOP

The East-West EW & GE mounting system consists of the following components:



Module end clamp



Module center clamp



Module rail

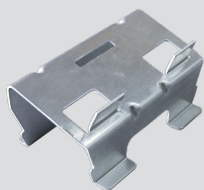
Protection mat  
(Minimum thickness 4–8 mm)



Upper support



Two pieces make  
one hooked into the other!

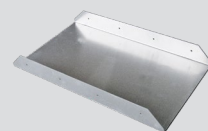


Lower support

Self-tapping screws



Connector  
profile



## For assembly you need:

- ▶ Cordless screwdriver
- ▶ Allen key 6 mm for the middle and end clamps
- ▶ 8 mm socket attachment for the self-tapping screws
- ▶ Measuring tape and tape measure
- ▶ Plastic hammer
- ▶ Gloves

## Compliance with regulatory and safety standards

During installation of the assembly system, it is necessary to ensure compliance with safety regulations and precautions applicable in the respective country. In Germany these are:

### Electrical installation::

- ▶ DIN VDE 0100-712 (IEC 60364-7-712) Low-voltage installations - Part 7-712: Requirements for premises, rooms and special installations - Solar photovoltaic (PV) power supply systems
- ▶ DIN VDE 0126 Solar systems for private use
- ▶ DIN EN 62305 Lightning protection
- ▶ VDEW guideline (2001)
- ▶ VDI 6012, Sheet 2, Decentralized energy systems in buildings - Photovoltaics
- ▶ TAB Technical connection conditions of the energy supply companies

### Accident prevention regulations::

- ▶ BGV A1 Principles of prevention
- ▶ BGV A3 Electrical installations and operating equipment
- ▶ BGV C22 Construction work
- ▶ BetrSichV, supplementary "Instructions for handling ladders and steps" (BGI 694)

### Other:

- ▶ VDS (Association of Property Insurers) guidelines
- ▶ DIN EN 1991-1-4 Wind loads
- ▶ DIN EN 1991-1-3 Snow loads

- ▶ DIN 1052 Design, calculation and dimensioning of timber structures - General design rules and design rules for building construction
- ▶ Current local provisions and regulations must be observed.

## Photograph roof damage!

Before installation, check whether there is damage of any kind, in particular water beading or damage to the roof cladding.

These should be documented with a digital camera to avoid later claims for compensation.

## Roof preparation

The roof surface to be covered must be free of impurities, e.g. sharp stones, moss, leaves, dirt, etc., to ensure that the floor rails can be laid flat. Clean the roof!



Caution!

### Personal danger!

Module installation and laying of DC cables must be performed by expert personnel. (Danger of electric shock! Danger of arcing! etc.) If there are lightning protection systems already in place, have a specialist company check whether they may be integrated into the system. Also check for changes to lightning protection requirements as a result of the installation.

TIPP



Take photos of roof damage!



Clean the roof!

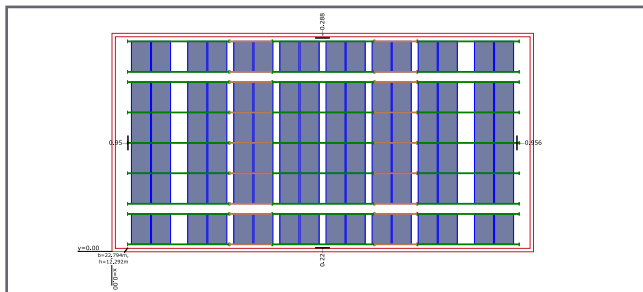


Wear gloves during assembly!  
Risk of injury from sharp edges!

# 1. Mounting the module rail

## 1.1 Calibration

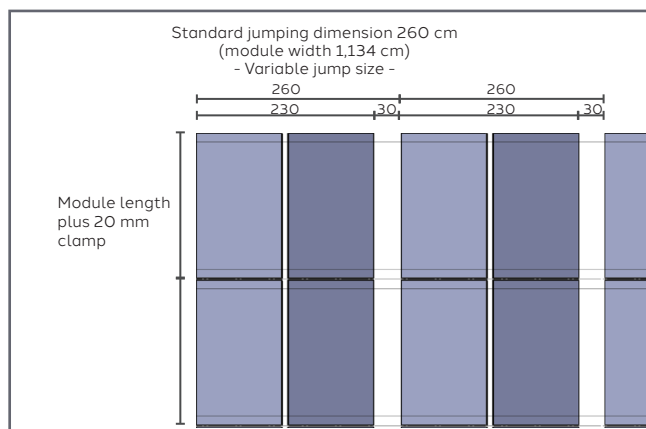
Take the installation plan to hand. Use the installation plan to measure the module field. Observe the distances according to the system statics.



Calibrating the module fields

## 1.2 Laying building protection mats

Lay out the building protection mats at a distance from the floor rails. The axis dimension is always the module length plus 20 mm for the module center clamp.

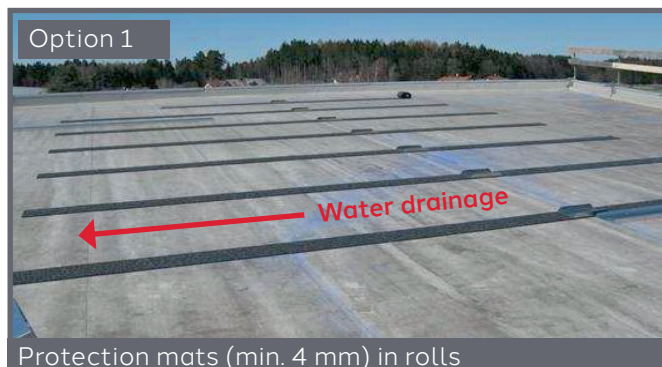


Apply the protection mat

For foil roofs made of PVC or TPO (depending on the manufacturer), **building protection mats with fleece lamination** are recommended!

### Option 1:

Laying the building protection mat (minimum thickness 4 mm) in rolls when installing along the direction of water flow (roof pitch)

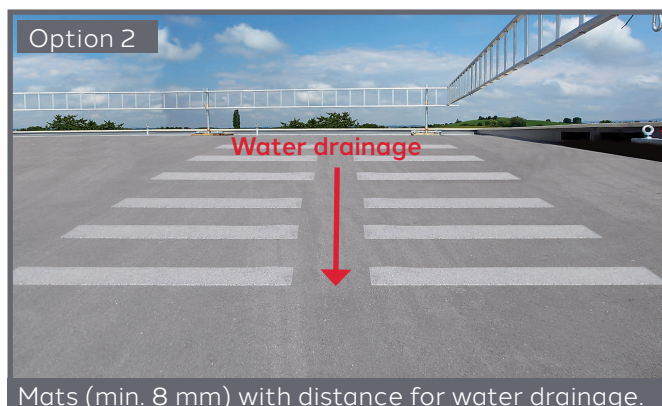


Protection mats (min. 4 mm) in rolls



### Option 2:

Lay building protection mats (minimum thickness 8 mm) to size (length 100 cm) parallel to each other - especially in the module area. This ensures better water drainage when installed across the direction of water flow.



Mats (min. 8 mm) with distance for water drainage.

# 1. Mounting the module rail



Apply module rail

## 1.3 Applying the module rail

Apply the module rail on the protection mat following the installation diagram.



Insert connector in the middle of the rail

## 1.4 Connecting the module rail

Insert the connector between the module rails.



Fasten the connector

Fasten the connector and the module rail using 8 self-tapping screws (tightening torque reference value indicated by manufacturer 2–3 Nm).



All other rails are arranged according to the design.



Aligning the rails

## 1.5 Adjustment and checks

Check the orientation of the module rail according to the installation plans. Check angle and parallelism of the rails.

# 2. Mounting the supports

## 2.1 Calibration

Calibrate the position of the supports:

- The front support must be mounted **150 mm** from the front edge of the module rail. (Assembly HSS).



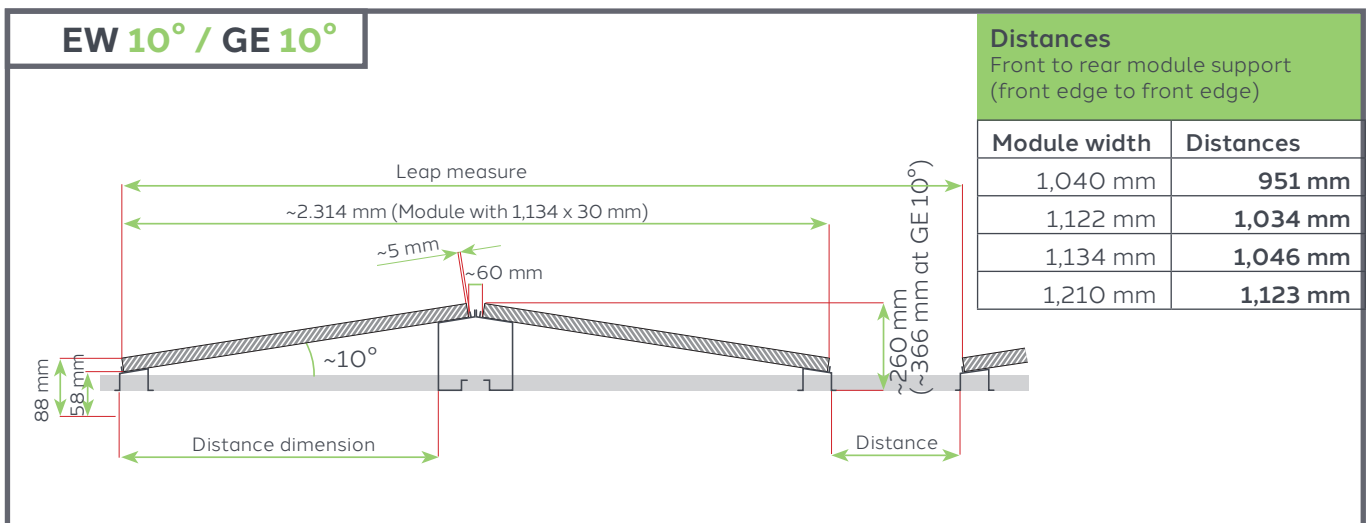
- Measure the rear module supports (long). The respective distances can be found in the following tables:



Positioning the supports



Einmessen der Modulstützen-Positionen



## 2.2 Routing the cables

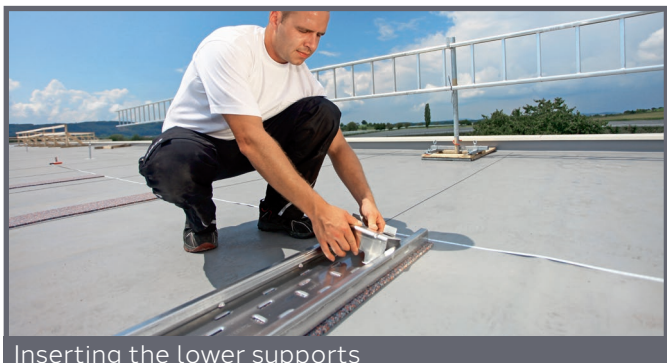
**Note:** The module rail also serves as a cable tray. It is recommended to insert the cables before fitting the supports.



Module rail also functions as a cable tray

## 2. Mounting the supports

### 2.3 Installing the supports



Inserting the lower supports



Easy insertion

Insert the front module support (short) of the first module row and click in with the foot.

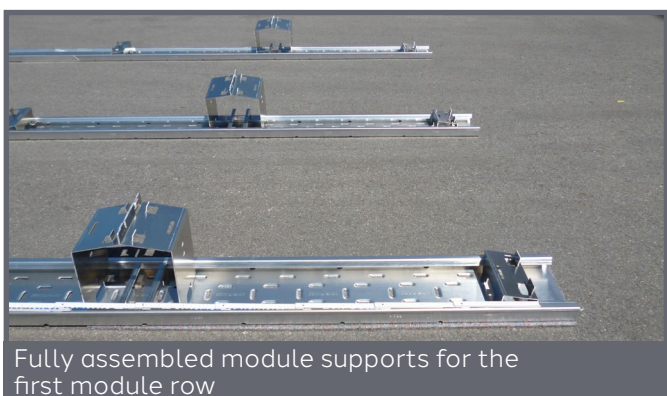


Interlocking the two rear module supports



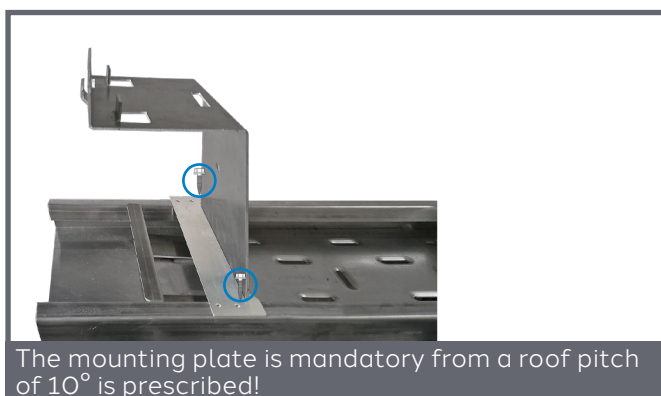
Clicking in the rear (high) module support

Hook the rear module supports (long) together at the upper lugs and also click in with the foot.



Fully assembled module supports for the first module row

Module supports of the first module row completely install. We recommend installing the first row of modules completely to prevent the floor rails from slipping.



The mounting plate is mandatory from a roof pitch of 10° is prescribed!


To prevent the supports from slipping, fixing plates are prescribed from 10°.

# 3. Installing the modules


## Ballasting

If the statics require the floor rails to be ballasted, this must be done before the modules are fixed. The specified ballast values must be adhered to!!





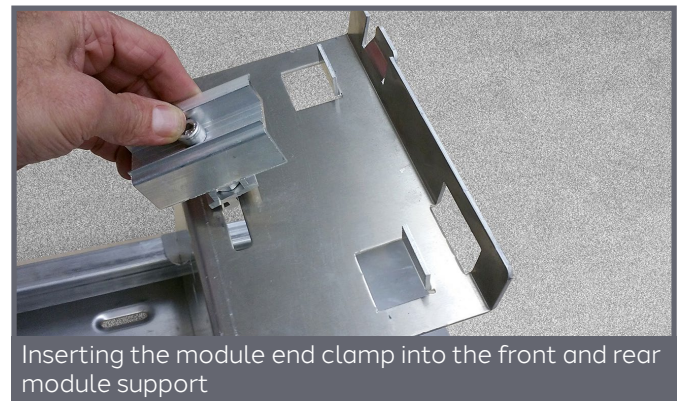
The ballast values provided are mandatory values.





## 3.1 Inserting the one-piece Duraklick end clamp

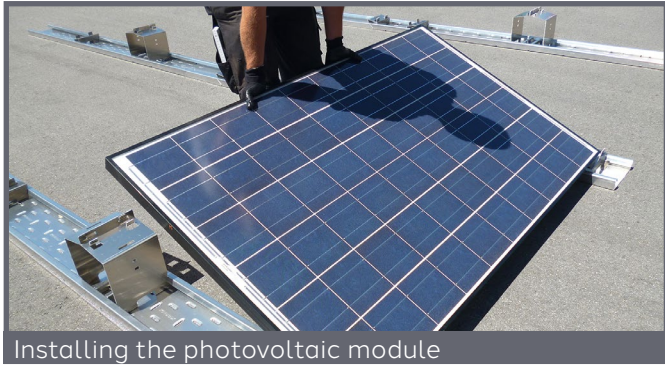
On the first row of modules, first insert the module end clamps into the front and rear module support of the side to be started.



The distance between the end clamp and the outer edge of the support (rear module support) must be between 90 mm and 92 mm!



# 3. Installing the modules



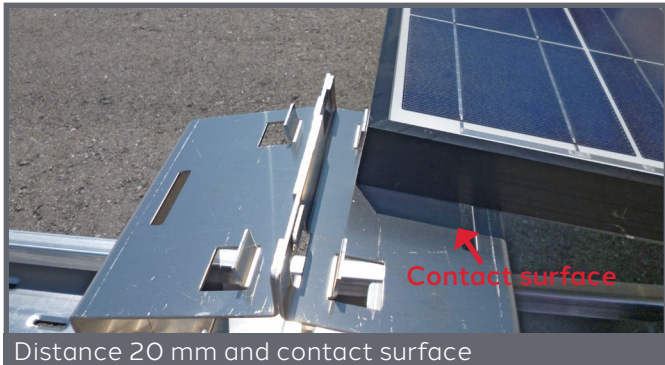
Installing the photovoltaic module

## 3.2 Inserting modules

You can start on the right or left.  
Place the first module on the module supports.

Ensure that the module frame rests on the entire surface of the module support.

If the modules are inserted close to the lugs, the distance between the modules is automatically approx. 60 mm for rear ventilation!



Distance 20 mm and contact surface

## 3.3 Inserting the module center clamps

Then click the module center clamps into the module supports (front and rear).



Inserting the module center clamp into the module supports

## 3.4 Attaching the cabling

Ensure that the string cables are installed and the modules are connected to each other. Otherwise the backs of the modules can no longer be reached.



Cabling

The string cables can be laid in the recess in the upper module support and fixed in place with cable ties.

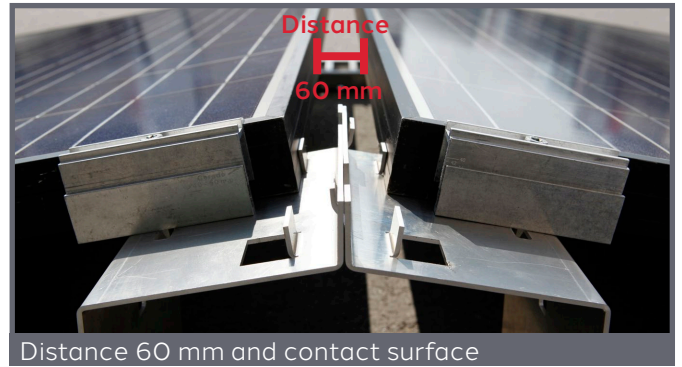


Recesses for cable routing

# 3. Installing the modules

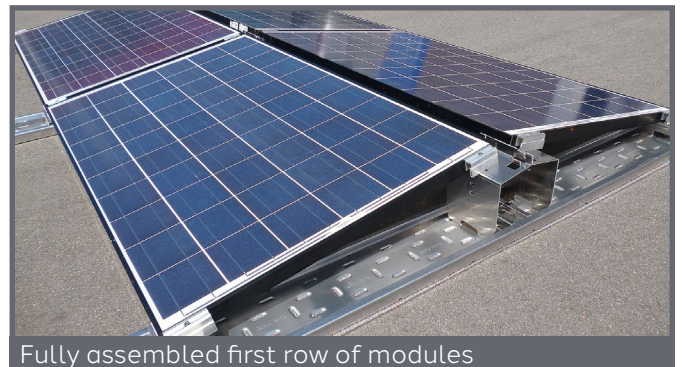
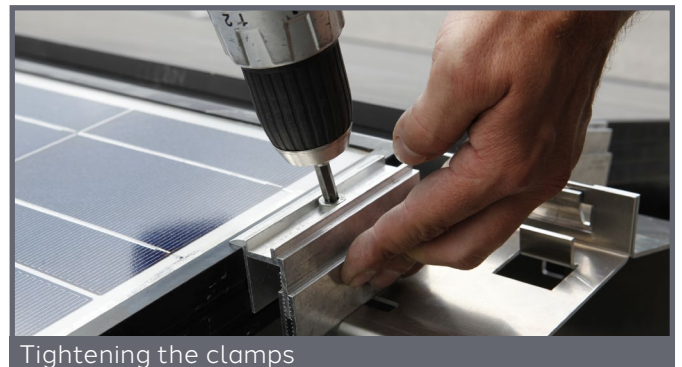
## 3.5 Fastening modules

All module center clamps and module end clamps must be tightened with a 6 mm hexagon screwdriver. Tightening torque approx. 10 - 15 Nm.



## 3.6 First row of modules ready Install

Repeat all work steps until the first row of modules has been installed. The first row of modules should be installed completely to prevent the floor rails from slipping.



### Wind hazard!

If installation is interrupted or stopped, all modules or rows must be fully installed.  
ATTENTION: Wind attack! Loose rails must be secured or weighted down!



## 4. Finishing work + accessories



### 4. Check

After completing installation, check the entire system for strength:

- Check the fastening of the module clamps.
- Check the entire construction for stability and strength.
- Check screw and clamp connections



### Accessories

We offer the following accessories for our systems:

#### HSS fall protection system

Horizontal rail system for up to 4 people  
DIN EN 795:2012 Type D + E CEN/TS 16415:2013  
The certified fall arrest system is a flexible and economical fall protection system that can be Duraklick substructures (including existing ones) can be installed.

For more safety when working on roofs!

## Exclusion of liability

The manufacturer will not be held liable for the use of the mounting system for purposes other than those intended.

## Warranty conditions

The terms provided by law shall apply.

## Manufacturer information

The Duraklick PV mounting system East-West EW 10° & GE 10° is manufactured by:

**SOLTOP Energie GmbH**  
Lindauer Straße 15  
D-88145 Hergatz  
[www.soltop-energie.eu](http://www.soltop-energie.eu)



ECO 10° EW

# Duraklick



## Warranty certificate

On all Duraklick mounting systems supplied by us you will receive

**10 years durability guarantee on all parts.**

If damage occurs during normal use and despite proper installation and handling, we will immediately replace the affected component within the warranty period.

The obligation to provide warranty service does not apply if the damage occurred in connection with exceptional stress (e.g. storm damage, exposure to instability of the substrate, special chemical or biological effects), unless it can be proven that the damage was not caused by this, but was essentially caused by a material or design defect. The installation and handling shall be governed by the technical product descriptions and installation instructions supplied by us for the respective products, the legally prescribed or generally accepted standards and principles of construction principles of construction as well as, if applicable, the plans, structural analyses and instructions prepared by us individually for the customer shall have priority.

The warranty is limited to the subsequent delivery of defective parts upon notification of the damage within the warranty period. Any statutory warranty or liability claims shall remain unaffected.

Insofar as a possible shorter service life is expressly stated for certain components in general or for a certain type of use, or replacement within a shorter period is provided for within the framework of plans individually drawn up by us, the warranty period shall be limited to this service life or period.

If the damage is covered by an insurance policy against storms and similar events (elementary insurance) or can be usually covered, there are no claims.

This warranty only substantiates claims by our contractual partner, through whom all warranty claims are to be processed. Claims may only be asserted by third parties if we agree to this. In all other respects, our General Terms and Conditions shall apply in their currently valid version.



For more information, please visit [www.soltop-energie.ch](http://www.soltop-energie.ch) & [www.soltop-energie.eu](http://www.soltop-energie.eu)

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Eine vom Bund und den Ländern gemeinsam getragene Anstalt des öffentlichen Rechts

Zulassungs- und Genehmigungsstelle für Bauprodukte und Bauarten

Datum: 24.09.2025      Geschäftszeichen: I 85-1.14.4-113/24

### Allgemeine bauaufsichtliche Zulassung / Allgemeine Bauartgenehmigung

**Nummer:**  
Z-14.4-691

**Antragsteller:**  
SOLTOP Energie GmbH  
Lindauer Straße 15  
88145 Hergatz

**Geltungsdauer**  
vom: 24. September 2025  
bis: 24. September 2030

**Gegenstand dieses Bescheides:**  
Flachdach-Montagesystem "Duraklick"

Der oben genannte Regelungsgegenstand wird hiermit allgemein bauaufsichtlich zugelassen/genehmigt.  
Dieser Bescheid umfasst neun Seiten und drei Anlagen mit 25 Seiten.  
Der Gegenstand ist erstmals am 10. März 2014 allgemein bauaufsichtlich zugelassen worden.



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# Mounting system East-West EW 10° GE 10° Assembly instruction



For more information, please visit [www.soltop-energie.ch](http://www.soltop-energie.ch) & [www.soltop-energie.eu](http://www.soltop-energie.eu)

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